

FILE 'CAPLUS, MEDLINE, BIOSIS, EMBASE' ENTERED AT 13:02:57 ON 31 MAR 2004

L1 1090 S JIANG.IN.
L2 8 S L1 AND FUSION PROTEIN
L3 2 DUP REM L2 (6 DUPLICATES REMOVED)
L4 0 S EXPRES### SAME FUSION PROTEIN SAME REPOTER SAME LIBRAR###
L5 35 S EXPRES###(10A) FUSION PROTEIN (10A) REPORTER#
L6 4 S L5 AND LIBRAR###
L7 0 S L6 AND CYCLOHEXIMIDE
L8 4 DUP REM L6 (0 DUPLICATES REMOVED)
L9 0 S FUSION(10A)GREEN FLUORESCENCE(10A)LIBRAR###
L10 40 S FUSION(10A)GREEN(10A)PROTEIN(10A)LIBRAR###
L11 15 S L10 AND EXPRES###
L12 0 S L11 AND CYCLOHEXIMIDE
L13 10 S L11 AND SCREEN###
L14 0 S L13 AND (INHIBIT###(10A)DEGRADAT###)
L15 0 S L13 AND INHIBIT###
L16 9 DUP REM L13 (1 DUPLICATE REMOVED)
L17 223458 S LI.IN.
L18 153 S L17 AND CYCLOHEXIMIDE
L19 0 S L18 AND FLUORESCENT PROTEIN
L20 0 S L18 AND FUSION PROTEIN
L21 37 S L17 AND FLUORESCENT PROTEIN
L22 0 S L21 AND LIBRAR###
L23 1 S L21 AND SCREEN###

10/053,516

FILE 'CAPLUS' ENTERED AT 13:02:57 ON 31 MAR 2004
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FILE 'BIOSIS' ENTERED AT 13:02:57 ON 31 MAR 2004
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FILE 'EMBASE' ENTERED AT 13:02:57 ON 31 MAR 2004
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=> s Jiang.in.
L1 1090 JIANG.IN.

=> s l1 and fusion protein
L2 8 L1 AND FUSION PROTEIN

=> dup rem l12
L12 IS NOT VALID HERE
The L-number entered has not been defined in this session, or it
has been deleted. To see the L-numbers currently defined in this
session, enter DISPLAY HISTORY at an arrow prompt (=>).

=> dup rem l2
PROCESSING COMPLETED FOR L2
L3 2 DUP REM L2 (6 DUPLICATES REMOVED)

=> d l3 1-2 bib ab kwic

L3 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 1
AN 1999:320171 CAPLUS
DN 131:100245
TI Expression of a truncated receptor protein tyrosine phosphatase kappa in
the brain of an adult transgenic mouse
AU Shen, P.; Canoll, P. D.; Sap, J.; Musacchio, J. M.
CS Department of Pharmacology, New York University Medical Center, New York,
NY, 10016, USA
SO Brain Research (1999), 826(2), 157-171
CODEN: BRREAP; ISSN: 0006-8993
PB Elsevier Science B.V.
DT Journal
LA English
AB Receptor protein tyrosine phosphatases (RPTPs) comprise a family of
proteins that feature intracellular phosphatase domains and an ectodomain
with putative ligand-binding motifs. Several RPTPs are expressed in the
brain, including RPTP-K which participates in homophilic cell-cell
interactions in vitro (Jiang, Y.-P et al., 1993; Sap, J. et al.,
1994). The homol. of RPTP- κ 's ectodomain to neural cell adhesion
mols. indicates potential roles in developmental processes such as axonal
growth and target recognition, as has been demonstrated for certain
Drosophila RPTPs. The brain distribution of RPTP- κ -expressing cells
has not been determined, however. In a gene-trap mouse model with a β -gal
+ neo (1-geo) insertion in the endogenous RPTP- κ gene, the
consequent loss of RPTP- κ 's enzymic activity does not produce any
obvious phenotypic defects (Skarnes, W. C. et al., 1995). Nevertheless,
since the transgene's expression is driven by the endogenous RPTP- κ
promoter, distribution of the truncated RPTP- κ / β -geo
fusion protein should reflect the regional and cellular
expression of wild-type RPTP- κ , and thus may identify sites where
RPTP- κ is important. Towards that goal, the authors have used this
mouse model to map the distribution of the truncated RPTP- κ / β -
geo fusion protein in the adult mouse brain using

β -galactosidase as a marker enzyme. Visualization of the β -galactosidase activity revealed a non-random pattern of expression, and identified cells throughout the CNS that display RPTP- κ promoter activity. Several neural systems highly expressed the transgene-most notably cortical, olfactory, hippocampal, hypothalamic, amygdaloid and visual structures. These well-characterized brain regions may provide a basis for future studies of RPTP- κ function.

RE.CNT 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

AB Receptor protein tyrosine phosphatases (RPTPs) comprise a family of proteins that feature intracellular phosphatase domains and an ectodomain with putative ligand-binding motifs. Several RPTPs are expressed in the brain, including RPTP-K which participates in homophilic cell-cell interactions in vitro (Jiang, Y.-P et al., 1993; Sap, J. et al., 1994). The homol. of RPTP- κ 's ectodomain to neural cell adhesion mols. indicates potential roles in developmental processes such as axonal growth and target recognition, as has been demonstrated for certain Drosophila RPTPs. The brain distribution of RPTP- κ -expressing cells has not been determined, however. In a gene-trap mouse model with a β -gal + neo (1-geo) insertion in the endogenous RPTP- κ gene, the consequent loss of RPTP- κ 's enzymic activity does not produce any obvious phenotypic defects (Skarnes, W. C. et al., 1995). Nevertheless, since the transgene's expression is driven by the endogenous RPTP- κ promoter, distribution of the truncated RPTP- κ / β -geo fusion protein should reflect the regional and cellular expression of wild-type RPTP- κ , and thus may identify sites where RPTP- κ is important. Towards that goal, the authors have used this mouse model to map the distribution of the truncated RPTP- κ / β -geo fusion protein in the adult mouse brain using β -galactosidase as a marker enzyme. Visualization of the β -galactosidase activity revealed a non-random pattern of expression, and identified cells throughout the CNS that display RPTP- κ promoter activity. Several neural systems highly expressed the transgene-most notably cortical, olfactory, hippocampal, hypothalamic, amygdaloid and visual structures. These well-characterized brain regions may provide a basis for future studies of RPTP- κ function.

L3 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 2

AN 1997:698880 CAPLUS

DN 128:31575

TI Cloning and expression of a gene encoding a protein obtained from earthworm secretion that is a chemoattractant for garter snakes

AU Liu, Weimin; Wang, Dalton; Chen, Ping; Halpern, Mimi

CS Department of Biochemistry, SUNY Health Science Center at Brooklyn, NY, 11203, USA

SO Journal of Biological Chemistry (1997), 272(43), 27378-27381
CODEN: JBCHA3; ISSN: 0021-9258

PB American Society for Biochemistry and Molecular Biology

DT Journal

LA English

AB The protein ES20, derived from earthworm shock secretion, is a vomeronasally mediated chemoattractant for garter snakes (Jiang, X. C., Inouchi, J., Wang, D., and Halpern, M. (1990) J. Biol. Chemical 265, 8736-8744). Based on its 15-residue N-terminal amino acid sequence, degenerative oligodeoxynucleotide probes were synthesized and used to screen a cDNA library that was constructed in sense orientation using a Uni-ZAP XR vector and XL1-Blue MRF' host. A gene was cloned from a polymerase chain reaction as well as from the cDNA library. A combination of the forward degenerative primer and T7 primer was used to obtain gene-specific DNA fragments, from which probes were synthesized and successfully used in screening the cDNA library. The ES20 gene is about 700 base pairs long and encodes 208 amino residues. The ES20 gene was excised from a recombinant plasmid pSK-ES20, ligated to pQE30 expression vector, and transformed into Escherichia coli strain JM109. The selected

recombinant plasmids were transformed into expression host cell, E. coli M15[pREP4]. Three transformants were selected, induced with isopropyl-1-thio- β -D-galactopyranoside for fusion gene expression and an expressed 20-kDa **fusion protein** purified under denaturing conditions. This protein was refolded and gave a pos. reaction against ES20-specific polyclonal antibodies. The **fusion protein** that had not been denatured remained as an aggregate and was an active chemoattractant for garter snakes.

RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

AB The protein ES20, derived from earthworm shock secretion, is a vomeronasally mediated chemoattractant for garter snakes (Jiang, X. C., Inouchi, J., Wang, D., and Halpern, M. (1990) J. Biol. Chemical 265, 8736-8744). Based on its 15-residue N-terminal amino acid sequence, degenerative oligodeoxynucleotide probes were synthesized and used to screen a cDNA library that was constructed in sense orientation using a Uni-ZAP XR vector and XL1-Blue MRF' host. A gene was cloned from a polymerase chain reaction as well as from the cDNA library. A combination of the forward degenerative primer and T7 primer was used to obtain gene-specific DNA fragments, from which probes were synthesized and successfully used in screening the cDNA library. The ES20 gene is about 700 base pairs long and encodes 208 amino residues. The ES20 gene was excised from a recombinant plasmid pSK-ES20, ligated to pQE30 expression vector, and transformed into Escherichia coli strain JM109. The selected recombinant plasmids were transformed into expression host cell, E. coli M15[pREP4]. Three transformants were selected, induced with isopropyl-1-thio- β -D-galactopyranoside for fusion gene expression and an expressed 20-kDa **fusion protein** purified under denaturing conditions. This protein was refolded and gave a pos. reaction against ES20-specific polyclonal antibodies. The **fusion protein** that had not been denatured remained as an aggregate and was an active chemoattractant for garter snakes.

=> s expres### same fusion protein same repoter same librar###

L4 0 EXPRES### SAME FUSION PROTEIN SAME REPOTER SAME LIBRAR###

=> s expres###(10a) fusion protein (10a) reporter#

L5 35 EXPRES###(10A) FUSION PROTEIN (10A) REPORTER#

=> s l5 and librar###

L6 4 L5 AND LIBRAR###

=> s l6 and cycloheximide

L7 0 L6 AND CYCLOHEXIMIDE

=> dup rem l6

PROCESSING COMPLETED FOR L6

L8 4 DUP REM L6 (0 DUPLICATES REMOVED)

=> d l8 1-4 bib ab kwic

L8 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2003:656310 CAPLUS

DN 139:174827

TI Methods and kits for isolating and characterizing short-lived proteins and arrays derived therefrom for use in drug screening

IN Li, Xianqiang; Jiang, Xin

PA USA

SO U.S. Pat. Appl. Publ., 30 pp., Cont.-in-part of U.S. Ser. No. 53,230.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003157540	A1	20030821	US 2003-347160	20030116
	US 2003134287	A1	20030717	US 2002-53230	20020116
	US 2003134288	A1	20030717	US 2002-53516	20020116
PRAI	US 2002-53230	A2	20020116		
	US 2002-53516	A2	20020116		
AB	<p>Compsn., kits and methods are provided for isolating and characterizing short-lived proteins. The method comprises taking a library of cells wherein each cell in the library expresses a fusion protein comprising a reporter protein and a protein encoded by a sequence from a cdna library derived from a sample of cells.. The sequence from the cdna library is varied within the cell library and the rate of protein expression or degradation by cells in the library is modified. A population of cells is selected from the library of cells based on the population of cells having different reporter signal intensities than other cells in the library wherein the difference between intensities is indicative of the population of cells expressing shorter lived fusion proteins than the fusion proteins expressed by the other cells in the library and determining protein sequences of the fusion proteins of the selected population of cells. Also provided are oligonucleotide, protein and antibody arrays derived from short-lived proteins. The arrays can be used for efficiently profiling expression of short-lived proteins, screening for binding agents and comparing expression levels under different conditions.</p>				
AB	<p>Compsn., kits and methods are provided for isolating and characterizing short-lived proteins. The method comprises taking a library of cells wherein each cell in the library expresses a fusion protein comprising a reporter protein and a protein encoded by a sequence from a cdna library derived from a sample of cells.. The sequence from the cdna library is varied within the cell library and the rate of protein expression or degradation by cells in the library is modified. A population of cells is selected from the library of cells based on the population of cells having different reporter signal intensities than other cells in the library wherein the difference between intensities is indicative of the population of cells expressing shorter lived fusion proteins than the fusion proteins expressed by the other cells in the library and determining protein sequences of the fusion proteins of the selected population of cells. Also provided are oligonucleotide, protein and antibody arrays derived from short-lived proteins. The arrays can be used for efficiently profiling expression of short-lived proteins, screening for binding agents and comparing expression levels under different conditions.</p>				
IT	<p>Animal cell (library; methods and kits for isolating and characterizing short-lived proteins and arrays derived therefrom for use in drug screening)</p>				
IT	<p>cdna library (proteins encoded by; methods and kits for isolating and characterizing short-lived proteins and arrays derived therefrom for use in drug screening)</p>				
L8	ANSWER 2 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN				
AN	2002:353656 CAPLUS				
DN	136:351377				
TI	Screening genes encoding nuclear transport proteins by GFP fusion protein expression and cell sorting				
IN	Maekawa, Takami; Mori, Maiko; Takahara, Yoshiyuki				
PA	Ajinomoto Co., Inc., Japan				
SO	PCT Int. Appl., 60 pp. CODEN: PIXXD2				
DT	Patent				

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002036823	A1	20020510	WO 2001-JP9700	20011106
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	AU 2002011021	A5	20020515	AU 2002-11021	20011106
	EP 1333099	A1	20030806	EP 2001-979034	20011106
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
	US 2003180801	A1	20030925	US 2002-204310	20020821
PRAI	JP 2000-337906	A	20001106		
	WO 2001-JP9700	W	20011106		

AB A method for screening a gene encoding a protein specifically transporting into nucleus by cloning each gene in a group of a large number of genes into an expression vector to **express as fusion protein** with a marker or **reporter** protein to construct a gene expression **library**, introducing this gene expression **library** into two cell groups to express the fusion proteins, stimulating one of the cell groups, separating cells wherein the fusion proteins are localized in the nucleus of such cells from both cell groups, and comparing the separated cells or nuclei to thereby search for a gene encoding a protein specifically transporting into the nucleus upon stimulus, is disclosed. A nuclear localization signal is used in fusion protein. Cell sorting, flow cytometry, microdissection, or microscopy observation, is used to sort cells. 11 ESTs and 6 unknown genes coding for proteins transporting into nucleus were identified by expressing as GFP fusion proteins in HepG2 cells and stimulating with TNF α . Eight unknown genes were also identified by heat shock stimulation.

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

AB A method for screening a gene encoding a protein specifically transporting into nucleus by cloning each gene in a group of a large number of genes into an expression vector to **express as fusion protein** with a marker or **reporter** protein to construct a gene expression **library**, introducing this gene expression **library** into two cell groups to express the fusion proteins, stimulating one of the cell groups, separating cells wherein the fusion proteins are localized in the nucleus of such cells from both cell groups, and comparing the separated cells or nuclei to thereby search for a gene encoding a protein specifically transporting into the nucleus upon stimulus, is disclosed. A nuclear localization signal is used in fusion protein. Cell sorting, flow cytometry, microdissection, or microscopy observation, is used to sort cells. 11 ESTs and 6 unknown genes coding for proteins transporting into nucleus were identified by expressing as GFP fusion proteins in HepG2 cells and stimulating with TNF α . Eight unknown genes were also identified by heat shock stimulation.

IT Nucleic acid **library**

(gene expression; screening genes encoding nuclear transport proteins by GFP fusion protein expression and cell sorting)

L8 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1997:740333 CAPLUS

DN 128:10873

TI A three-hybrid reporter gene method for screening for proteins binding defined ligands

IN Liu, Jun; Licitra, Edward J.
 PA Massachusetts Institute of Technology, USA
 SO PCT Int. Appl., 40 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9741255	A1	19971106	WO 1997-US6912	19970425
	W: CA, JP				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	CA 2252886	AA	19971106	CA 1997-2252886	19970425
	EP 907750	A1	19990414	EP 1997-921370	19970425
	EP 907750	B1	20020918		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	US 5928868	A	19990727	US 1997-845674	19970425
	JP 2000508923	T2	20000718	JP 1997-539036	19970425
	DE 29724617	U1	20020718	DE 1997-29724617	19970425
	EP 1241265	A2	20020918	EP 2002-76267	19970425
	EP 1241265	A3	20040218		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
	AT 224454	E	20021015	AT 1997-921370	19970425
	ES 2183166	T3	20030316	ES 1997-921370	19970425
PRAI	US 1996-17341P	P	19960426		
	EP 1997-921370	A3	19970425		
	WO 1997-US6912	W	19970425		

AB A method for identifying the binding partner for a define ligand using an extension of the two-hybrid system is described. The method uses a fusion protein of the LexA protein and a ligand binding protein to bind to a LexA operator upstream of a reporter gene. This is bound to by a conjugate of the natural ligand for the protein and the ligand of interest. Possible binding partners for the ligand are identified by introduction of an expression library in which the proteins are synthesized as fusion products with a transcriptional activator. When the necessary combination of LexA fusion protein, ligand, and transcriptional activator fusion protein are brought together, the reporter gene is expressed. The method is particularly intended for the identification of natural binding partners for small mols. A fusion product of LexA and the rat glucocorticoid receptor is used in a reconstruction experiment with FK506-binding protein FKBP12 is used to demonstrate using a conjugate of dexamethasone and FK506 as the hybrid ligand.

AB A method for identifying the binding partner for a define ligand using an extension of the two-hybrid system is described. The method uses a fusion protein of the LexA protein and a ligand binding protein to bind to a LexA operator upstream of a reporter gene. This is bound to by a conjugate of the natural ligand for the protein and the ligand of interest. Possible binding partners for the ligand are identified by introduction of an expression library in which the proteins are synthesized as fusion products with a transcriptional activator. When the necessary combination of LexA fusion protein, ligand, and transcriptional activator fusion protein are brought together, the reporter gene is expressed. The method is particularly intended for the identification of natural binding partners for small mols. A fusion product of LexA and the rat glucocorticoid receptor is used in a reconstruction experiment with FK506-binding protein FKBP12 is used to demonstrate using a conjugate of dexamethasone and FK506 as the hybrid ligand.

IT Combinatorial library
 (nucleic acid, screening for ligand-binding proteins of; three-hybrid reporter gene method for screening for proteins binding defined

ligands)

IT Nucleic acid **library**
 (screening for ligand-binding proteins of; three-hybrid reporter gene
 method for screening for proteins binding defined ligands)

L8 ANSWER 4 OF 4 MEDLINE on STN

AN 97140325 MEDLINE

DN PubMed ID: 8986806

TI A novel member of the RING finger family, KRIP-1, associates with the
 KRAB-A transcriptional repressor domain of zinc finger proteins.

AU Kim S S; Chen Y M; O'Leary E; Witzgall R; Vidal M; Bonventre J V

CS Renal Unit, Massachusetts General Hospital, Charlestown 02129, USA.

NC DK 38452 (NIDDK)
 DK 39773 (NIDDK)
 NS 10828 (NINDS)

SO Proceedings of the National Academy of Sciences of the United States of
 America, (1996 Dec 24) 93 (26) 15299-304.
 Journal code: 7505876. ISSN: 0027-8424.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

OS GENBANK-U67303

EM 199701

ED Entered STN: 19970219
 Last Updated on STN: 19970219
 Entered Medline: 19970128

AB The Kruppel-associated box A (KRAB-A) domain is an evolutionarily
 conserved transcriptional repressor domain present in approximately
 one-third of zinc finger proteins of the Cys2-His2 type. Using the yeast
 two-hybrid system, we report the isolation of a cDNA encoding a novel
 murine protein, KRAB-A interacting protein 1 (KRIP-1) that physically
 interacts with the KRAB-A region. KRIP-1 is a member of the RBCC
 subfamily of the RING finger, or Cys3HisCys4, family of zinc binding
 proteins whose other members are known to play important roles in
 differentiation, oncogenesis, and signal transduction. The KRIP-1 protein
 has high homology to TIF1, a putative modulator of ligand-dependent
 activation function of nuclear receptors. A 3.5-kb mRNA for KRIP-1 is
 ubiquitously expressed among all adult mouse tissues studied. When a
GAL4-KRIP-1 fusion protein is expressed in
 COS cells with a chloramphenicol acetyltransferase **reporter**
 construct with five GAL4 binding sites, there is dose-dependent repression
 of transcription. Thus, KRIP-1 interacts with the KRAB-A region of C2H2
 zinc finger proteins and may mediate or modulate KRAB-A transcriptional
 repressor activity.

AB . . . of nuclear receptors. A 3.5-kb mRNA for KRIP-1 is ubiquitously
 expressed among all adult mouse tissues studied. When a **GAL4-KRIP-1**
fusion protein is expressed in COS cells with
 a chloramphenicol acetyltransferase **reporter** construct with five
 GAL4 binding sites, there is dose-dependent repression of transcription.
 Thus, KRIP-1 interacts with the KRAB-A region of. . .

CT . . . Check Tags: Support, Non-U.S. Gov't; Support, U.S. Gov't, P.H.S.
 Amino Acid Sequence
 Animals
 Base Sequence
 COS Cells
 Conserved Sequence
 Embryo
Gene Library
 Kidney: ME, metabolism
 Mice
 Molecular Sequence Data
 Nuclear Proteins: BI, biosynthesis
 Nuclear Proteins: CH, chemistry

*Nuclear Proteins: ME, . . .

```
=> s fusion(10a)green fluorescence(10a)librar###
L9          0 FUSION(10A) GREEN FLUORESCENCE(10A) LIBRAR###

=> s fusion(10a)green(10a)protein(10a)librar###
L10         40 FUSION(10A) GREEN(10A) PROTEIN(10A) LIBRAR###

=> s l10 and expres###
L11         15 L10 AND EXPRES###

=> s l11 and cycloheximide
L12         0 L11 AND CYCLOHEXIMIDE

=> l11 and screen###
L11 IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).
```

```
=> s l11 and screen###
L13         10 L11 AND SCREEN###

=> s l13 and (inhibit###(10a)degradat###)
L14         0 L13 AND (INHIBIT###(10A) DEGRADAT###)
```

```
=> s l13 and inhibit###
L15         0 L13 AND INHIBIT###
```

```
=> dup rem l13
PROCESSING COMPLETED FOR L13
L16         9 DUP REM L13 (1 DUPLICATE REMOVED)
```

```
=> d l16 1-9 bib ab kwic
```

```
L16  ANSWER 1 OF 9  CAPLUS  COPYRIGHT 2004 ACS on STN  DUPLICATE 1
AN   2003:296076  CAPLUS
DN   138:315791
TI   Fusions of random peptide libraries in scaffold proteins such as green
     fluorescent protein or  $\beta$ -lactamase
IN   Anderson, David; Peelle, Beau Robert; Bogenberger, Jakob Maria
PA   Rigel Pharmaceuticals, Inc., USA
SO   U.S., 63 pp., Cont.-in-part of U.S. 6,180,343.
     CODEN: USXXAM
DT   Patent
LA   English
FAN.CNT 4
```

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	US 6548632	B1	20030415	US 1999-415765	19991008
	US 6180343	B1	20010130	US 1998-169015	19981008
	US 6548249	B1	20030415	US 2000-626581	20000727
	US 6562617	B1	20030513	US 2000-626580	20000727
	US 2001003650	A1	20010614	US 2000-749959	20001227
	US 6596485	B2	20030722		
	US 2003143562	A1	20030731	US 2002-177725	20020620
	US 2003224412	A1	20031204	US 2003-393449	20030318
PRAI	US 1998-169015	A2	19981008		
	US 1999-415765	A3	19991008		
	US 2002-177725	A2	20020620		

```
AB   The invention relates to the use of scaffold proteins, particularly
     green fluorescent protein (GFP) and  $\beta$ -lactamase
     TEM-1, in fusion constructs with random and defined peptides and
```

peptide libraries. The fusions act to increase the cellular expression levels, decrease the cellular catabolism, increase the conformational stability relative to linear peptides, and increase the steady state concns. of the random peptides and random peptide library members **expressed** in cells for the purpose of detecting the presence of the peptides and **screening** random peptide libraries. N-terminal, C-terminal, dual N- and C-terminal, and one or more internal fusions are all contemplated. Internal fusions in Renilla GFP may be made in loops 1-5 (amino acid residues 130-135, 154-159, 172-175, 188-193, or 208-216) for optimal presentation of the peptide. Inclusion of multiple highly flexible amino acid residues between GFP and the library allows minimal conformational constraints on the GFP. Designed insertion sites in loops 2-4 retain a high level of GFP fluorescence when the inserts are flanked by multiple glycines in the tetrapeptide linkers. Novel fusions utilizing self-binding peptides to create a conformationally stabilized fusion domain are also contemplated.

RE.CNT 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

- AB The invention relates to the use of scaffold proteins, particularly **green fluorescent protein (GFP)** and β -lactamase TEM-1, in **fusion** constructs with random and defined peptides and peptide libraries. The fusions act to increase the cellular expression levels, decrease the cellular catabolism, increase the conformational stability relative to linear peptides, and increase the steady state concns. of the random peptides and random peptide library members **expressed** in cells for the purpose of detecting the presence of the peptides and **screening** random peptide libraries. N-terminal, C-terminal, dual N- and C-terminal, and one or more internal fusions are all contemplated. Internal fusions in Renilla GFP may be made in loops 1-5 (amino acid residues 130-135, 154-159, 172-175, 188-193, or 208-216) for optimal presentation of the peptide. Inclusion of multiple highly flexible amino acid residues between GFP and the library allows minimal conformational constraints on the GFP. Designed insertion sites in loops 2-4 retain a high level of GFP fluorescence when the inserts are flanked by multiple glycines in the tetrapeptide linkers. Novel fusions utilizing self-binding peptides to create a conformationally stabilized fusion domain are also contemplated.
- ST scaffold protein fusion random peptide library; **green fluorescent protein fusion random peptide library**; lactamase fusion random peptide library
- IT Animal cell line
(293, GFP fusions **expressed** in; fusions of random peptide libraries in scaffold proteins such as green fluorescent protein or β -lactamase)
- IT Animal cell line
(JURKAT, GFP fusions **expressed** in; fusions of random peptide libraries in scaffold proteins such as green fluorescent protein or β -lactamase)

L16 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2003:950623 CAPLUS

DN 140:13712

TI Structurally biased random peptide libraries based on different scaffolds

IN Anderson, David; Peelle, Beau Robert; Bogenberger, Jakob Maria

PA USA

SO U.S. Pat. Appl. Publ., 110 pp., Cont.-in-part of U.S. Ser. No. 177,725.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	US 2003224412	A1	20031204	US 2003-393449	20030318
	US 6180343	B1	20010130	US 1998-169015	19981008

	US 6548632	B1	20030415	US 1999-415765	19991008
	US 2003143562	A1	20030731	US 2002-177725	20020620
PRAI	US 1998-169015	A2	19981008		
	US 1999-415765	A2	19991008		
	US 2002-177725	A2	20020620		

AB The invention relates to the use of scaffold proteins, particularly **green fluorescent protein (GFP)**, in **fusion** constructs with random and defined peptides and peptide **libraries**, to increase the cellular expression levels, decrease the cellular catabolism, increase the conformational stability relative to linear peptides, and to increase the steady state concns. of the library peptides and peptide library members **expressed** in cells for the purpose of detecting the presence of the peptides and **screening** peptide libraries. N-terminal, C-terminal, dual N- and C-terminal and one or more internal fusions are all contemplated. Novel fusions utilizing self-binding peptides to create a conformationally stabilized fusion domain are also contemplated.

AB The invention relates to the use of scaffold proteins, particularly **green fluorescent protein (GFP)**, in **fusion** constructs with random and defined peptides and peptide **libraries**, to increase the cellular expression levels, decrease the cellular catabolism, increase the conformational stability relative to linear peptides, and to increase the steady state concns. of the library peptides and peptide library members **expressed** in cells for the purpose of detecting the presence of the peptides and **screening** peptide libraries. N-terminal, C-terminal, dual N- and C-terminal and one or more internal fusions are all contemplated. Novel fusions utilizing self-binding peptides to create a conformationally stabilized fusion domain are also contemplated.

ST scaffold protein fusion random peptide library; **green** fluorescent **protein fusion** random peptide **library**; lactamase fusion random peptide library

L16 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2003:590695 CAPLUS

DN 139:144918

TI Random peptide libraries in the context of a reporter protein scaffold for use in analysis of peptide effects on protein structure and function

IN Anderson, David; Peelle, Beau Robert; Bogenberger, Jakob Maria

PA Rigel Pharmaceuticals, Inc., USA

SO U.S. Pat. Appl. Publ., 110 pp., Cont.-in-part of U. S. Ser. No. 415,765.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	US 2003143562	A1	20030731	US 2002-177725	20020620
	US 6180343	B1	20010130	US 1998-169015	19981008
	US 6548632	B1	20030415	US 1999-415765	19991008
	US 2003224412	A1	20031204	US 2003-393449	20030318
PRAI	US 1998-169015	A2	19981008		
	US 1999-415765	A2	19991008		
	US 2002-177725	A2	20020620		

AB A method of using a reporter protein as a framework within which the effects of random peptides from a library on protein structure and function is described. A DNA library in which the gene for the reporter protein has sequences encoding random peptides inserted at defined sites is prepared and **expressed** in a suitable host. The library may be biased, e.g. to increase the possibility of including a peptide promoting an α -helical structure. The peptides may be at the N-terminal, the C-terminal, or at internal sites. The library is **screened** for members showing properties such as increases in cellular reporter concentration,

increased stability from lower rates of cellular catabolism, increased conformational stability relative to linear peptides, and increased steady state concns. of the library peptides. A reporter protein may be replaced by a protein essential for cell survival. Novel fusions utilizing self-binding peptides to create a conformationally stabilized fusion domain are also contemplated. Loops in green fluorescent were identified as potential sites for the peptide library and test peptides. Tests with two different insertions showed consistent effects on protein fluorescence in Escherichia coli and mammalian cells.

AB A method of using a reporter protein as a framework within which the effects of random peptides from a library on protein structure and function is described. A DNA library in which the gene for the reporter protein has sequences encoding random peptides inserted at defined sites is prepared and **expressed** in a suitable host. The library may be biased, e.g. to increase the possibility of including a peptide promoting an α -helical structure. The peptides may be at the N-terminal, the C-terminal, or at internal sites. The library is **screened** for members showing properties such as increases in cellular reporter concentration,

increased stability from lower rates of cellular catabolism, increased conformational stability relative to linear peptides, and increased steady state concns. of the library peptides. A reporter protein may be replaced by a protein essential for cell survival. Novel fusions utilizing self-binding peptides to create a conformationally stabilized fusion domain are also contemplated. Loops in green fluorescent were identified as potential sites for the peptide library and test peptides. Tests with two different insertions showed consistent effects on protein fluorescence in Escherichia coli and mammalian cells.

ST scaffold protein fusion random peptide library; **green** fluorescent **protein fusion** random peptide **library**; lactamase fusion random peptide library

IT Peptides, biological studies

RL: BSU (Biological study, unclassified); BIOL (Biological study) (bioactive, **screening** for; random peptide libraries in context of reporter protein scaffold for use in anal. of peptide effects on protein structure and function)

L16 ANSWER 4 OF 9 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN

AN 2003:378382 BIOSIS

DN PREV200300378382

TI Green fluorescent protein fusions with random peptides.

AU Anderson, David [Inventor, Reprint Author]; Bogenberger, Jakob Maria [Inventor]

CS Menlo Park, CA, USA

ASSIGNEE: Rigel Pharmaceuticals, Inc.

PI US 6596485 July 22, 2003

SO Official Gazette of the United States Patent and Trademark Office Patents, (July 22 2003) Vol. 1272, No. 4. <http://www.uspto.gov/web/menu/patdata.htm> 1. e-file..

ISSN: 0098-1133 (ISSN print).

DT Patent

LA English

ED Entered STN: 13 Aug 2003

Last Updated on STN: 13 Aug 2003

AB The invention relates to the use of fluorescent proteins, particularly **green** fluorescent **protein** (GFP), in **fusion** constructs with random and defined peptides and peptide **libraries**, to increase the cellular expression levels, decrease the cellular catabolism, increase the conformational stability relative to linear peptides, and to increase the steady state concentrations of the random peptides and random peptide library members **expressed** in cells for the purpose of detecting the presence of the peptides and **screening** random peptide libraries. N-terminal, C-terminal, dual N- and C-terminal and one or more internal fusions are all contemplated.

Novel fusions utilizing self-binding peptides to create a conformationally stabilized fusion domain are also contemplated.

AB The invention relates to the use of fluorescent proteins, particularly **green fluorescent protein (GFP)**, in **fusion** constructs with random and defined peptides and peptide libraries, to increase the cellular expression levels, decrease the cellular catabolism, increase the conformational stability relative to linear peptides, and to increase the steady state concentrations of the random peptides and random peptide library members **expressed** in cells for the purpose of detecting the presence of the peptides and **screening** random peptide libraries. N-terminal, C-terminal, dual N- and C-terminal and one or more internal fusions are all contemplated. Novel fusions. . .

IT Methods & Equipment

random peptide library **screening**: laboratory techniques

L16 ANSWER 5 OF 9 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN

AN 2003:280434 BIOSIS

DN PREV200300280434

TI Fusions of scaffold proteins with random peptide libraries.

AU Anderson, David [Inventor, Reprint Author]; Peelle, Beau Robert [Inventor]; Bogenberger, Jakob Maria [Inventor]

CS ASSIGNEE: Rigel Pharmaceuticals, Inc.

PI US 6562617 May 13, 2003

SO Official Gazette of the United States Patent and Trademark Office Patents, (May 13 2003) Vol. 1270, No. 2. <http://www.uspto.gov/web/menu/patdata.html> . e-file.

ISSN: 0098-1133 (ISSN print).

DT Patent

LA English

ED Entered STN: 11 Jun 2003

Last Updated on STN: 11 Jun 2003

AB The invention relates to the use of scaffold proteins, particularly **green fluorescent protein (GFP)**, in **fusion** constructs with random and defined peptides and peptide libraries, to increase the cellular expression levels, decrease the cellular catabolism, increase the conformational stability relative to linear peptides, and to increase the steady state concentrations of the random peptides and random peptide library members **expressed** in cells for the purpose of detecting the presence of the peptides and **screening** random peptide libraries. N-terminal, C-terminal, dual N- and C-terminal and one or more internal fusions are all contemplated. Novel fusions utilizing self-binding peptides to create a conformationally stabilized fusion domain are also contemplated.

AB The invention relates to the use of scaffold proteins, particularly **green fluorescent protein (GFP)**, in **fusion** constructs with random and defined peptides and peptide libraries, to increase the cellular expression levels, decrease the cellular catabolism, increase the conformational stability relative to linear peptides, and to increase the steady state concentrations of the random peptides and random peptide library members **expressed** in cells for the purpose of detecting the presence of the peptides and **screening** random peptide libraries. N-terminal, C-terminal, dual N- and C-terminal and one or more internal fusions are all contemplated. Novel fusions. . .

L16 ANSWER 6 OF 9 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN

AN 2003:227250 BIOSIS

DN PREV200300227250

TI Fusions of scaffold proteins with random peptide libraries.

AU Anderson, David [Inventor, Reprint Author]; Peelle, Beau Robert [Inventor]; Bogenberger, Jakob Maria [Inventor]

CS San Bruno, CA, USA

ASSIGNEE: Rigel Pharmaceuticals, Inc.

PI US 6548249 April 15, 2003
 SO Official Gazette of the United States Patent and Trademark Office Patents,
 (Apr 15 2003) Vol. 1269, No. 3. <http://www.uspto.gov/web/menu/patdata.html>
 . e-file.
 ISSN: 0098-1133 (ISSN print).
 DT Patent
 LA English
 ED Entered STN: 7 May 2003
 Last Updated on STN: 7 May 2003
 AB The invention relates to the use of scaffold proteins, particularly
green fluorescent protein (GFP), in fusion
 constructs with random and defined peptides and peptide **libraries**
 , to increase the cellular expression levels, decrease the cellular
 catabolism, increase the conformational stability relative to linear
 peptides, and to increase the steady state concentrations of the random
 peptides and random peptide library members **expressed** in cells
 for the purpose of detecting the presence of the peptides and
screening random peptide libraries. N-terminal, C-terminal, dual
 N- and C-terminal and one or more internal fusions are all contemplated.
 Novel fusions utilizing self-binding peptides to create a conformationally
 stabilized fusion domain are also contemplated.
 AB The invention relates to the use of scaffold proteins, particularly
green fluorescent protein (GFP), in fusion
 constructs with random and defined peptides and peptide **libraries**
 , to increase the cellular expression levels, decrease the cellular
 catabolism, increase the conformational stability relative to linear
 peptides, and to increase the steady state concentrations of the random
 peptides and random peptide library members **expressed** in cells
 for the purpose of detecting the presence of the peptides and
screening random peptide libraries. N-terminal, C-terminal, dual
 N- and C-terminal and one or more internal fusions are all contemplated.
 Novel fusions. . .
 IT Methods & Equipment
 peptide detection: laboratory techniques; random peptide library
screening: laboratory techniques

L16 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2000:241464 CAPLUS

DN 132:261918

TI Fusions of scaffold proteins with random peptide libraries

IN Anderson, David; Bogenberger, Jakob Maria; Peelle, Beau Robert

PA Rigel Pharmaceuticals, Inc., USA

SO PCT Int. Appl., 89 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000020574	A2	20000413	WO 1999-US23715	19991008
	WO 2000020574	A3	20000921		
	W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
	US 6180343	B1	20010130	US 1998-169015	19981008
	CA 2345215	AA	20000413	CA 1999-2345215	19991008
	EP 1119617	A2	20010801	EP 1999-957466	19991008
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,			

IE, SI, LT, LV, FI, RO

JP 2002526108	T2	20020820	JP 2000-574670	19991008
AU 768126	B2	20031204	AU 2000-15164	19991008
US 2001003650	A1	20010614	US 2000-749959	20001227
US 6596485	B2	20030722		
PRAI US 1998-169015	A	19981008		
WO 1999-US23715	W	19991008		

AB The invention relates to the use of scaffold proteins, particularly **green** fluorescent **protein** (GFP), in **fusion** constructs with random and defined peptides and peptide libraries, to increase the cellular expression levels, decrease the cellular catabolism, increase the conformational stability relative to linear peptides, and to increase the steady state concns. of the random peptides and random peptide library members **expressed** in cells for the purpose of detecting the presence of the peptides and **screening** random peptide libraries. N-terminal, C-terminal, dual N- and C- terminal and one or more internal fusions are all contemplated. Novel fusions utilizing self-binding peptides to create a conformationally stabilized fusion domain are also contemplated. Thus, expts. to identify sites which may be used to insert peptides into GFP are described.

AB The invention relates to the use of scaffold proteins, particularly **green** fluorescent **protein** (GFP), in **fusion** constructs with random and defined peptides and peptide libraries, to increase the cellular expression levels, decrease the cellular catabolism, increase the conformational stability relative to linear peptides, and to increase the steady state concns. of the random peptides and random peptide library members **expressed** in cells for the purpose of detecting the presence of the peptides and **screening** random peptide libraries. N-terminal, C-terminal, dual N- and C- terminal and one or more internal fusions are all contemplated. Novel fusions utilizing self-binding peptides to create a conformationally stabilized fusion domain are also contemplated. Thus, expts. to identify sites which may be used to insert peptides into GFP are described.

ST scaffold protein peptide fusion library; **green** fluorescent **protein** peptide **fusion** library

L16 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:114405 CAPLUS
DN 132:147593
TI Methods and compositions for peptide libraries displayed on light-emitting scaffolds of proteins
IN Kamb, Carl Alexander; Abedi, Majid
PA Arcaris, Inc., USA
SO U.S., 24 pp., Cont.-in-part of U.S. 5,955,275.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 11

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6025485	A	20000215	US 1997-965477	19971106
	US 6623922	B1	20030923	US 1997-800664	19970214
	US 5955275	A	19990921	US 1997-812994	19970304
	CA 2309543	AA	19990520	CA 1998-2309543	19981106
	WO 9924617	A1	19990520	WO 1998-US23778	19981106
	W:				
	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,				
	DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE,				
	KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW,				
	MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR,				
	TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,				
	FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,				
	CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	AU 9915200	A1	19990531	AU 1999-15200	19981106

EP 1029081 A1 20000823 EP 1998-959391 19981106
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, FI

JP 2001522587	T2	20011120	JP 2000-519609	19981106
US 6566057	B1	20030520	US 1999-269006	19990317
NO 2000002375	A	20000630	NO 2000-2375	20000505
US 2002132229	A1	20020919	US 2001-929663	20010814
US 2002090605	A1	20020711	US 2001-935929	20010823

PRAI US 1997-800664 A2 19970214
 US 1997-812994 A2 19970304
 US 1996-699266 A2 19960819
 WO 1997-US14514 A2 19970819
 US 1997-965477 A 19971106
 WO 1998-US23778 W 19981106
 US 1999-259155 B1 19990226
 US 1999-378420 B1 19990820

AB Methods and compns. for peptides or protein fragments displayed on scaffolds and libraries of sequences encoding peptides or protein fragments displayed on scaffolds that permit the properties of the library to be easily and quant. monitored are disclosed. The scaffold is a protein that is capable of emitting light. Thus, solvent-exposed loops are identified in the Aequorea victoria green fluorescent protein (GFP) which can accommodate and present random aptamers while allowing GFP to retain its autofluorescent properties; these loops optimally comprise amino acid residues Ala155-Ile161, Lys162-Gln183, and Gln184-Ser205. A minibody (Ig)-GFP scaffold system is also described. The plasmid vector pVT21, which permits induction of GFP expression in the presence of galactose, was obtained by manipulation of pACA151, a 6.7-kb 2μ yeast shuttle vector containing a red-shifted (S65T) GFP expression cassette and the phosphoglycerate kinase 3' end. Thus, anal. of the expression of individual members of the library when they are **expressed** in cells may be carried out using instruments that can analyze the emitted light, such as flow sorter (FACS), a spectrophotometer, a microtiter plate reader, a CCD, a fluorescence microscope, or other similar device. This permits **screening** of the expression library in host cells on a cell-by-cell basis, and enrichment of the library for sequences that have predetd. characteristics.

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

AB Methods and compns. for peptides or protein fragments displayed on scaffolds and libraries of sequences encoding peptides or protein fragments displayed on scaffolds that permit the properties of the library to be easily and quant. monitored are disclosed. The scaffold is a protein that is capable of emitting light. Thus, solvent-exposed loops are identified in the Aequorea victoria green fluorescent protein (GFP) which can accommodate and present random aptamers while allowing GFP to retain its autofluorescent properties; these loops optimally comprise amino acid residues Ala155-Ile161, Lys162-Gln183, and Gln184-Ser205. A minibody (Ig)-GFP scaffold system is also described. The plasmid vector pVT21, which permits induction of GFP expression in the presence of galactose, was obtained by manipulation of pACA151, a 6.7-kb 2μ yeast shuttle vector containing a red-shifted (S65T) GFP expression cassette and the phosphoglycerate kinase 3' end. Thus, anal. of the expression of individual members of the library when they are **expressed** in cells may be carried out using instruments that can analyze the emitted light, such as flow sorter (FACS), a spectrophotometer, a microtiter plate reader, a CCD, a fluorescence microscope, or other similar device. This permits **screening** of the expression library in host cells on a cell-by-cell basis, and enrichment of the library for sequences that have predetd. characteristics.

IT Immunoglobulins
 RL: ARU (Analytical role, unclassified); BPN (Biosynthetic preparation); BPR (Biological process); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC

(Process)

(fusion products, green fluorescent protein
fusion library; methods and compns. for peptide
libraries displayed on light-emitting scaffolds of proteins)

L16 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1999:330461 CAPLUS

DN 130:333721

TI Methods and compositions for peptide libraries displayed on light-emitting scaffolds of proteins

IN Kamb, Carl Alexander; Abedi, Majid

PA Ventana Genetics, Inc., USA

SO PCT Int. Appl., 56 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 11

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9924617	A1	19990520	WO 1998-US23778	19981106
	W:				
	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,				
	DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE,				
	KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW,				
	MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR,				
	TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW:				
	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,				
	FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,				
	CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	US 6025485	A	20000215	US 1997-965477	19971106
	CA 2309543	AA	19990520	CA 1998-2309543	19981106
	AU 9915200	A1	19990531	AU 1999-15200	19981106
	EP 1029081	A1	20000823	EP 1998-959391	19981106
	R:				
	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				
	IE, FI				
	JP 2001522587	T2	20011120	JP 2000-519609	19981106
	US 6566057	B1	20030520	US 1999-269006	19990317
	NO 2000002375	A	20000630	NO 2000-2375	20000505
PRAI	US 1997-965477	A	19971106		
	US 1997-800664	A2	19970214		
	US 1997-812994	A2	19970304		
	WO 1998-US23778	W	19981106		

AB Methods and compns. for peptides or protein fragments displayed on scaffolds and libraries of sequences encoding peptides or protein fragments displayed on scaffolds that permit the properties of the library to be easily and quant. monitored are disclosed. The scaffold is a protein that is capable of emitting light. Thus, anal. of the expression of individual members of the library when they are **expressed** in cells may be carried out using instruments that can analyze the emitted light, such as a flow sorter (FACS), a spectrophotometer, a microtiter plate reader, a CCD, a fluorescence microscope, or other similar device. This permits **screening** of the expression library in host cells on a cell-by-cell basis, and enrichment of the library for sequences that have predetd. characteristics.

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

AB Methods and compns. for peptides or protein fragments displayed on scaffolds and libraries of sequences encoding peptides or protein fragments displayed on scaffolds that permit the properties of the library to be easily and quant. monitored are disclosed. The scaffold is a protein that is capable of emitting light. Thus, anal. of the expression of individual members of the library when they are **expressed** in cells may be carried out using instruments that can analyze the emitted light, such as a flow sorter (FACS), a spectrophotometer, a microtiter plate reader, a CCD, a fluorescence microscope, or other similar device.

This permits **screening** of the expression library in host cells on a cell-by-cell basis, and enrichment of the library for sequences that have predetd. characteristics.

ST peptide **library fusion** light emitting scaffold

green fluorescent protein

IT Immunoglobulins

RL: ARU (Analytical role, unclassified); BPN (Biosynthetic preparation); BPR (Biological process); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process)

(**green fluorescent protein fusion**

library; methods and compns. for peptide **libraries** displayed on light-emitting scaffolds of proteins)

=>